

**CONFIDENTIAL**

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**WORK RECORD***file OC-E*CONTRACT NO. RD-128, T.O.3

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CONTRACTOR [REDACTED]WORK ORDER NO. 3 CHANGE ORDER NO.            JOB TITLE Measurement of Reflex Slot Antenna.ISSUE DATE 23 December 1958 CRASH            PRIORITY NO.           PREMIUM PAY none 25X1TOTAL COST \$3300.25REQUESTED COMPLETION DATE 13 February 1959 ORCONTRACTORS ESTIMATED COMPLETION DATE 45 days after receipt of W.O.**WORK DESCRIPTION:**

I. A requirement exists for the measurement of the characteristics of a reflex slot antenna. The antenna is to be mounted on the case supplied, and is to be tested as a receiving antenna using a IN415E crystal diode. The amplifier used in making these measurements will be GFE in order to approximate the operating conditions under which the antenna will be used.  
(cont'd on attachment.)

EQUIPMENT SECURITY CLASSIFICATION SECRET

CONTRACTOR'S ACCEPTANCE:

CONTRACTING OFFICER'S APPROVAL

(Signature) [REDACTED](Signature) [REDACTED]DATE COMPLETED [REDACTED]

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WORK ASSIGNED BY [REDACTED]BY: PHONE            VISIT X WRITTEN TASK           

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REQUESTING DIVISION APPROVAL [REDACTED]

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ENGINEERING DIVISION APPROVAL [REDACTED]CONTACT FOR REQUESTING DIVISION [REDACTED]COGNIZANT COMPANY CONTACTS: TECHNICAL [REDACTED]PHONE [REDACTED]

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BLDG. & ROOM [REDACTED]

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PHONE [REDACTED]

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ADMINISTRATIVE [REDACTED]BLDG. & ROOM [REDACTED]

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**SECRET****CONFIDENTIAL**

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~~S-E-C-R-E-T~~WORK ORDER NO. 3**CONFIDENTIAL****WORK DESCRIPTION CONTINUED**

II. The following results will be discussed in the contractor's report to the contracting organization:

1. Gain measurements, relative to an isotropic radiator, will be made at 200 megacycle intervals over the frequency range from 100 mcs to 10,000 mcs with the antenna perpendicular to the ground plane.
2. Gain measurements, relative to an isotropic radiator, will be made at 200 megacycle intervals over the frequency range from 1,000 mcs to 10,000 mcs with the antenna at an angle of 135 degrees with respect to the ground.
3. Gain measurements, relative to an isotropic radiator, will be made at 200 megacycle intervals over the frequency range of 1,000 mcs to 10,000 mcs with the antenna parallel to the ground.
4. From the gain measurements described above, it will be determined at which frequency or frequencies the response of the antenna is greatest in each of the three antenna orientations. Radiation patterns will be plotted in both E and H planes, in each of the three antenna orientations, at the frequency or frequencies of greatest response, not to exceed four (4) frequencies for each orientation or a total of twenty-four (24) patterns.

III. Government Furnished Equipment. The following equipment will be GFE: 1) Sample antenna, 2) mounting case, 3) amplifier, 4) crystal and crystal detector.

IV. Deliverable Items. The contractor will submit a written report discussing the results obtained under Para. II. Measurements, curves, diagrams etc. will be included in this report. The report will be submitted in the following quantities: One reproducible and three copies.

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